## AMENDMENTS TO THE SPECIFICATION

On Page 1, please add the following paragraph after the title, and before the heading "*TECHNICAL FIELD*":

CROSS-REFERENCE TO RELATED APPLICATION

This application is based upon and claims the benefit of priority from Japanese Patent Application No. 2003-203630, filed July 30, 2003, and Application No. 2003-209582, filed August 29, 2003, the entire contents of which are incorporated herein by reference.

Please replace the Paragraph beginning on Line 13 of Page 1 and after the heading "*BACKGROUND ART*" with the following paragraph rewritten in amendment format:

According to the conventional wireless packet communication method in compliance with standard specifications, only one wireless channel to be used is decided in advance, whether the wireless channel is available or not is detected (carrier sense) prior to transmission of the data packet, and one data packet is transmitted only when the wireless channel is available. Such control allows one wireless channel to be shared among a plurality of stations (hereinafter, STA) by staggering times ((1) ~~IEEE 802.11 "MAC and PHY Specification for Metropolitan Area Networks," IEEE 802.11, 1998;~~ "International Standard ISO/IEC 8802-11 ANSI/IEEE Std. 802.11, 1999 edition, Information technology – Telecommunications and information exchange between systems – Local and metropolitan area networks – Specific requirements – Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications"; (2) "Low-powered Data Communication System/Broadband Mobile Access Communication System (CSMA) Standard", ~~ARIB~~

SDT-T71 ARIB STD-T71 version 1.0, Association of Radio Industries and Businesses, settled in 2000).

In the section titled "*DISCLOSURE OF THE INVENTION*", please replace the following paragraphs as indicated below.

Please replace the Paragraph beginning on Line 18 of Page 7 with the following paragraph rewritten in amendment format:

According to the invention in claim 1, According to a first aspect of the invention, in the case of transmitting a data packet in a special format which is generated by connecting or patching a plurality of data frames and a data packet in a standard format which is generated from one data frame between STAs, the STA supporting the special format transmits a request packet which is receivable only by the STA supporting the special format, before transmitting the data packet. The STA having received the request packet and supporting the special format manages a transmit-side STA of the request packet as one supporting the special format, and transmits to the STA a reply packet which is receivable only by the STA supporting the special format. The STA having received the reply packet and supports the special format manages the transmit-side STA of the reply packet as the one supporting the special format. Then, it transmits the data packet in the special format when the receive-side STA supports the special format, and transmits the data packet in the standard format when it does not support the special format, based on management information in an own station.

Please replace the Paragraph beginning on Line 10 of Page 8 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 2,~~ According to a second aspect of the invention, the STA transmitting the data packet sets format identification information at least indicating a distinction between the standard format and special format in a control information field in the data packet to be transmitted. The STA having received the data packet selects the standard format or special format according to contents of the format identification information included in the control information field in the received data packet, and subjects the data packet to reception processing according to a definition of the selected format.

Please replace the Paragraph beginning on Line 21 of Page 8 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 3,~~ According to a third aspect of the invention, the STA having received the data packet identifies the transmit-side STA from a control information field in the received data packet, recognizes the format supported by the transmit-side STA according to the management information in the own station, and subjects the data packet to reception processing according to a definition of the recognized format.

Please replace the Paragraph beginning on Line 5 of Page 9 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 4,~~ According to a forth aspect of the invention, in the case of generating a plurality of data packets in a special format in which a plurality of data frames are patched, a subheader including a field indicating a data size, a field indicating an order of the frame, and a field indicating presence/absence of a subsequent frame is added to each of the plurality of data frames. Next, one data block is generated by connecting the data frames having added the subheaders thereto, and a number of data blocks corresponding to a number of simultaneous transmissions are generated by dividing the one data block so that the respective data blocks have a uniform packet time length. Next, a main header including information necessary to restore the patched data frames is added to each of the number of data blocks corresponding to the number of simultaneous transmissions, and further a control information field of the data packet is added before the data block having the main header added thereto and a frame check field of the data packet is added thereafter, to generate the data packets.

Please replace the Paragraph beginning on Line 19 of Page 9 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 5,~~ According to a fifth aspect of the invention, the main header includes a class field indicating a structure of the main header according to the number of data frames and fragments included in the data packet, a frame number field indicating the number of frames in the data packet, a first frame starting position field indicating a frame starting position in the data packet in unit of byte, and a fragment field indicating the presence/absence of the fragment as a divided data frame and a position thereof.

Please replace the Paragraph beginning on Line 25 of Page 9 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 6,~~ According to a sixth aspect of the invention, the main header includes a class field indicating a structure of the main header according to the number of data frames and fragments included in the data packet, and a first frame starting position field indicating a frame starting position in the data packet in unit of byte.

Please replace the Paragraph beginning on Line 4 of Page 10 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 7,~~ According to a seventh aspect of the invention, the main header is formed without the field(s) except for the class field when the numbers of data frames and fragments in the data packet are one.

Please replace the Paragraph beginning on Line 7 of Page 10 with the following paragraph rewritten in amendment format:

~~The invention in claim 8~~ An eighth aspect of the invention is the procedure for restoring the data packet ~~in claim 5~~ in the fifth aspect of the invention. The structure of the main header is checked according to a value of the class field of the main header in each data packet received. Further, the starting position of the subheader of the data frame is recognized according to the value of the first frame starting position field of the main header in the data packet, and the corresponding data

frame is cut out from the data size of the subheader. Furthermore, according to the values of the frame number field and the fragment field of the main header in the data packet, the corresponding data frame is cut out from the data size of the subheader when the data frame follows, and connecting processing with the fragment at a head of the subsequent data packet is performed when the fragment follows. Thereby, it is possible to restore the plural data frames included in each data packet received.

Please replace the Paragraph beginning on Line 18 of Page 10 with the following paragraph rewritten in amendment format:

~~The invention in claim 9~~ <u>A ninth aspect of the invention</u> is the procedure for restoring the data packet ~~in claim 6~~ <u>in the sixth aspect of the invention</u>. The structure of the main header is checked according to a value of the class field of the main header in each data packet received. Further, the starting position of the subheader of the data frame is recognized according the value of the first frame starting position field of the main header in the data packet, and the corresponding data frame is cut out from the data size of the subheader. Furthermore, the data size of the subheader following the cut-out data frame is compared with a size of a portion subsequent to the subheader to distinguish whether it is the data frame or the fragment as a divided data frame, the corresponding data frame is cut out from the data size of the subheader when the data frame follows, and connecting processing with the fragment at a head of the subsequent data packet is performed when the fragment follows. Thereby, it is possible to restore the plural data frames included in each data packet received.

Please replace the Paragraph beginning on Line 5 of Page 11 with the following paragraph rewritten in amendment format:

~~The invention in claim 10~~ <u>A tenth aspect of the invention</u> is the procedure for restoring the data packet ~~in claim 7~~ <u>in the seventh aspect of the invention</u>. The structure of the main header is checked according to a value of the class field of the main header in each data packet received. Further, the data size of the subheader is compared with a size of a portion subsequent to the subheader to distinguish whether it is the data frame or the fragment as a divided data frame, when the numbers of data frame and fragment are one according to the structure of the class field, the corresponding data frame is cut out from the data size of the subheader when the data frame follows, and connecting processing with the fragment at a head of the subsequent data packet is performed when the fragment follows. Thereby, it is possible to restore the data frame included in the received data packet.

Please replace the Paragraph beginning on Line 15 of Page 11 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 11,~~ <u>According to an eleventh aspect of the invention,</u> in the case of generating one or a plurality of data packet(s) in a special format in which a plurality of data frames are aggregated, subheaders each of which includes a field indicating a data size, a field indicating an order of the frame, and a field indicating presence/absence of a subsequent frame are added to the data frames. Next, a data block is generated by aggregating the data frames having added the subheaders thereto. Next, a main header including information necessary

to restore the aggregated data frames is added to the data block, and further a control information field of the data packet is added before the data block having the main header added thereto and a frame check field of the data packet is added thereafter, to generate the data packet.

Please replace the Paragraph beginning on Line 24 of Page 11 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 12,~~ According to a twelfth aspect of the invention, the main header includes a class field indicating a structure of the main header according to the number of data frames included in the data packet, and a frame number field indicating the number of frames in the data packet.

Please replace the Paragraph beginning on Line 2 of Page 12 with the following paragraph rewritten in amendment format:

~~According to the invention in claim 13,~~ the main header is formed without the fields except for the class field when the number of data frames in the data packet is one.

Please replace the Paragraph beginning on Line 4 of Page 12 with the following paragraph rewritten in amendment format:

~~The invention in claim 14~~ A fourteenth aspect of the invention is the procedure for restoring the data packet ~~in claim 12~~ in the twelfth aspect of the invention. The

structure of the class field is checked according to a value of the class field of the main header in each data packet received. Further, the corresponding data frames are cut out sequentially from the data sizes of the subheaders of the data frames for each of the data packets, according to the value of the frame number field of the main header. Thereby, it is possible to restore the data frames included in the received data packet.

Please replace the Paragraph beginning on Line 18 of Page 7 with the following paragraph rewritten in amendment format:

~~The invention in claim 15~~ A fifteenth aspect of the invention is the procedure for restoring the data packet ~~in claim 13~~ in the thirteenth aspect of the invention. The structure of the class field is checked according to a value of the class field of the main header in each data packet received. Further, the corresponding data frames are cut out sequentially according to the data size of the subheader of the data frame for each of the data packets. Thereby, it is possible to restore the data frame included in the received data packet.

On page 12, please add the following paragraph beginning on line 18 and after the heading *"BRIEF DESCRIPTION OF THE DRAWINGS"*:

The nature, principle, and utility of the invention will become more apparent from the following detailed description when read in conjunction with the accompanying drawings in which like parts are designated by identical reference numbers, in which:

In the section titled *"BEST MODE FOR CARRYING OUT THE INVENTION"*, please replace the following paragraphs as indicated below.

Please replace the Paragraph beginning on Line 15 of Page 16 with the following paragraph rewritten in amendment format:

Similarly, when the STA B performs the transmission to the STA A, it refers to the contents of the function management table in the own station to check whether the receive-side STA supports the special format or not (S17). In this case, since the receive-side STA A supports the special format, the STA B generates a data packet P1b according to the special format and transmits it to the STA A (S17). At this time, in a MAC header (control information field) of the data packet [[P1a]] P1b, format identification information indicating the special format is set. In the case of the simultaneous transmission, a plurality of data packets having the uniform packet time length are generated in the special format.

Please replace the Paragraph beginning on Line 25 of Page 17 and continuing through Line 6, Page 18, with the following paragraph rewritten in amendment format:

Moreover, when the STA C performs the transmission to the STA A, it generates a data packet P1b according to the standard format and transmits it (S26). At this time, in a MAC header (control information field) of the data packet [[P1a]] P1b, format identification information indicating the standard format is set. When the STA A receives the data packet P1b, it recognizes that it is in the standard format by

the format identification information set in the MAC header, and processes the received data packet P1b according to the definition of the standard format (S27).

On Page 44, please add the following paragraph beginning on Line 19 and before the heading "*INDUSTRIAL APPLICABILITY*":

The invention is not limited to the above embodiments and various modifications may be made without departing from the spirit and scope of the invention. Any improvement may be made in part or all of the components.